Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

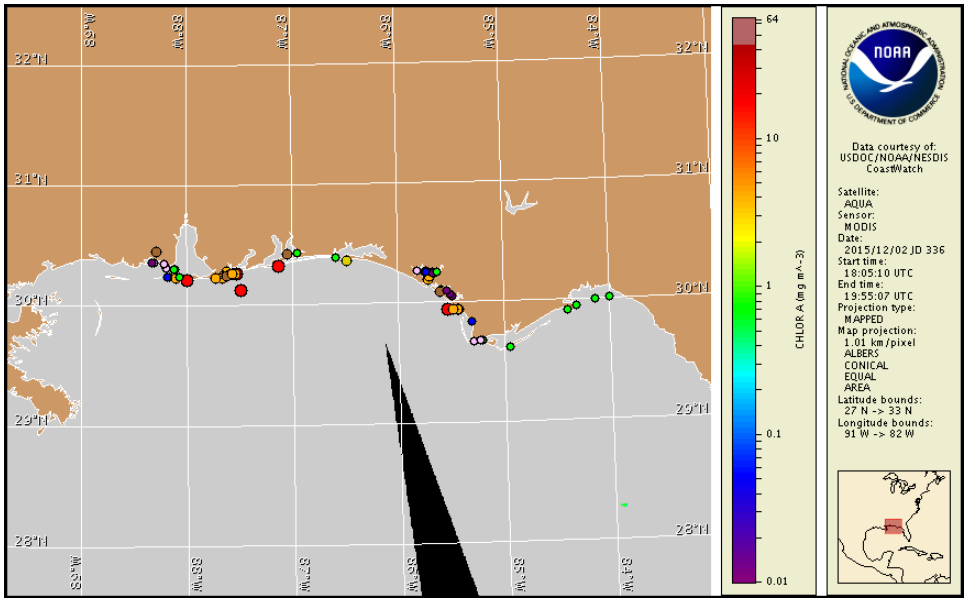
Thursday, 03 December 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, November 30, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from November 23 to December 2: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore Mobile and Baldwin counties in Alabama and portions of northwest Florida from Escambia to Gulf counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore Alabama and northwest Florida Thursday, December 3 to Monday, December 7 is listed below:

County Region: Forecast (Duration)
Mobile County: High (Th-Su), Moderate (M)
Baldwin County: Low (Th-M)
Baldwin County, bay regions-Perdido Bay area Moderate (Th-M)
Escambia County: Low (Th-M)
Santa Rosa County: Very Low (Th-M)
Santa Rosa County, bay regions: Low (Th-M)
Okaloosa County: Very Low (Th-M)
Okaloosa County, bay regions: Very Low (Th-M)
Walton County: (Th-M)
Bay County: Low (Th), Very Low (F-M)
Bay County, bay regions: Moderate (Th-M)
Gulf County: Very Low (Th-M)
Gulf County, west bay regions-St. Joseph Bay area: Moderate (Th-M)
All Other NWFL County Regions: None expected (Th-M)
SWFL County Regions: Visit http://tidesandcurrents.noaa.gov/hab/#swfl

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Reports of respiratory irritation have been received from Baldwin County, Alabama and Okaloosa, Escambia and Walton Counties in northwest Florida over the past several days. Reports of dead fish have also been received from Saint Bernard Parish, Louisiana and Okaloosa, Escambia and Walton Counties in northwest Florida.

Analysis

Samples collected from Alabama and northwest Florida indicate the presence of *Karenia brevis* alongshore from Mobile County, Alabama to Gulf County, Florida.

Recent water samples confirm up to 'high' concentrations of *K. brevis* alongshore Baldwin County, Alabama and Escambia County, Florida (FWRI, ADPH; 11/29, 12/1). Up to 'medium' concentrations of *K. brevis* have been confirmed in bay regions of Mobile County, Alabama and in bay regions of and alongshore Bay County, Florida (FWRI, ADPH; 11/28, 12/1). *K. brevis* has been identified in up to 'low b' concentrations alongshore Okaloosa County, Florida and in up to 'low a' concentrations in the bay regions of Santa Rosa County, Florida (FWRI; 11/30). Samples collected alongshore the north end of Chandeleur Island in Louisiana and in offshore waters south of the MS/LA border contain background concentrations of *K. brevis* (MDMR; 12/1). Reports of respiratory irritation have been received from Baldwin County, Alabama and Okaloosa, Escambia and

Walton Counties in northwest Florida over the past several days (FWRI; 11/30-12/3). Reports of dead fish have also been received from Saint Bernard Parish, Louisiana and Okaloosa, Escambia and Walton Counties in northwest Florida (FWRI, MDMR; 11/30-12/3). Additional sampling along- and offshore Louisiana and Mississippi is recommended to determine the extent of *K. brevis* in the region. Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

Over the past several days, MODIS Aqua ensemble imagery has been completely obscured by clouds from Louisiana to northwest Florida preventing the analysis of chlorophyll levels.

Forecast winds today through Monday will reduce the potential for impacts at the coast along Alabama and northwest Florida.

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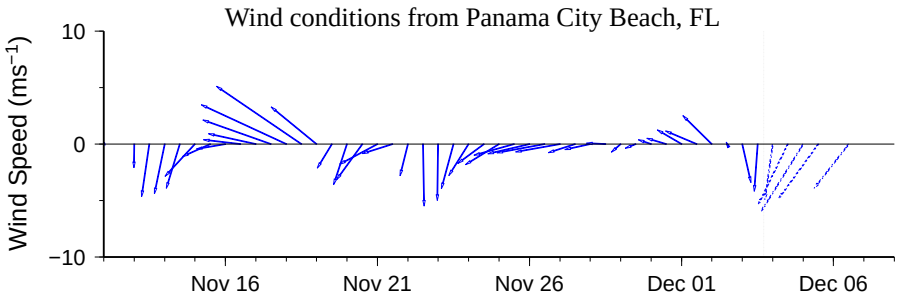
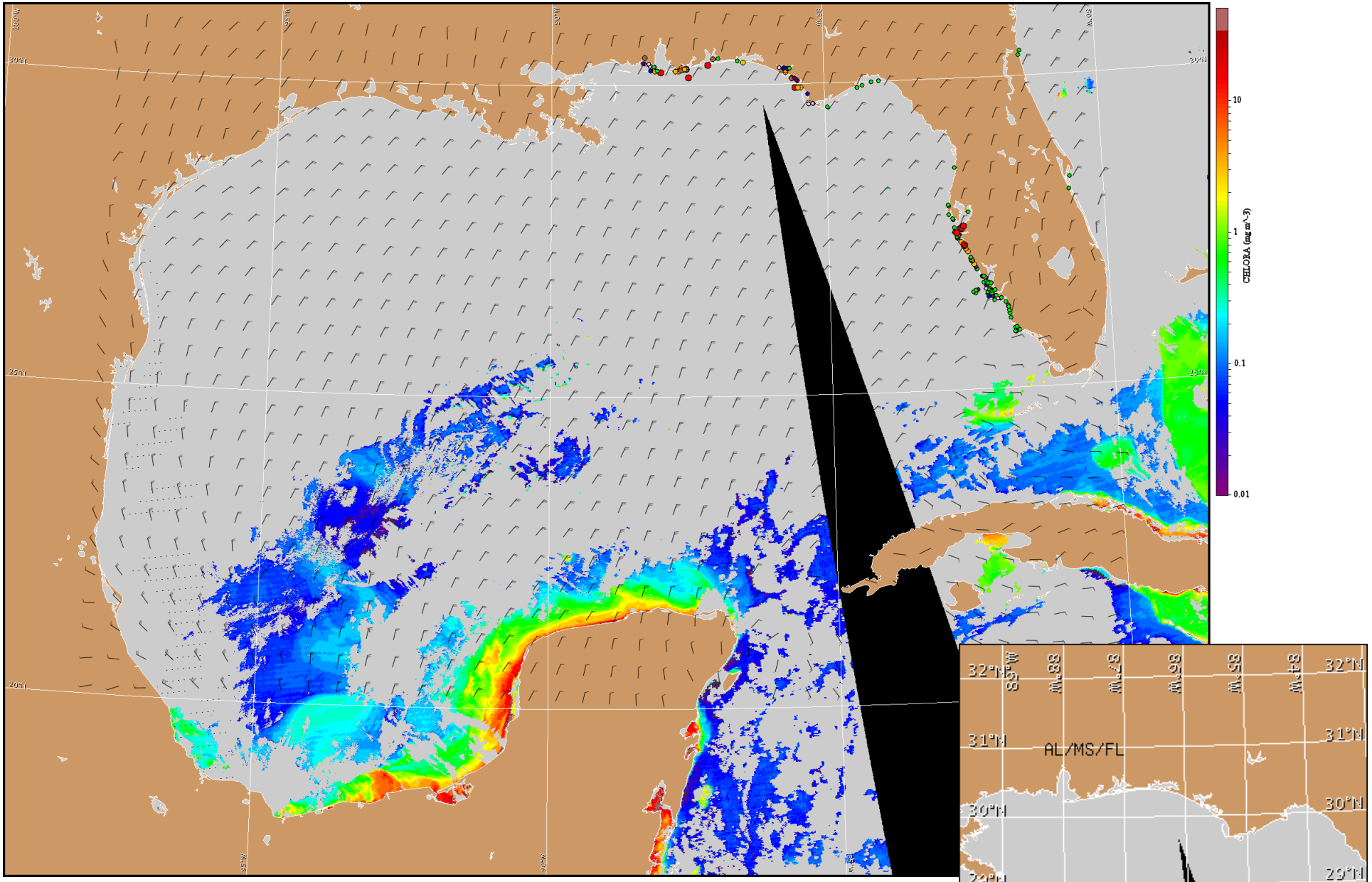


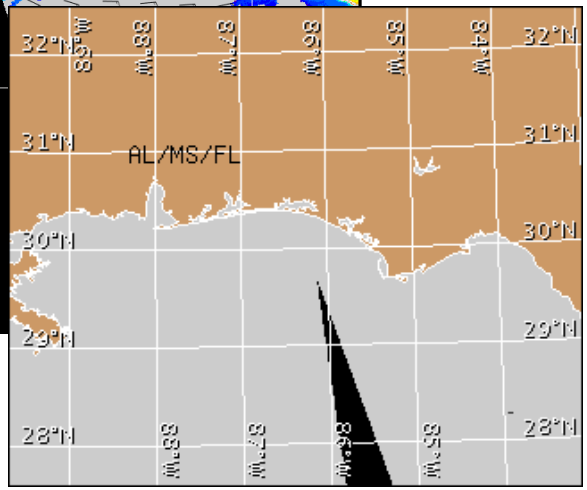
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Escambia to Gulf counties: North to northeast winds (15-25 kn, 8-13 m/s) today through Monday.



Satellite chlorophyll image and forecast winds for December 4, 2015 12Z with points representing cell concentration sampling data from November 23 to December 2: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf



Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).